ENVIRONMENTAL ASSESSMENT

FOR

STREAM BANK STABILIZATION AT BIG BAYOU PIERRE AND NORTH FORK OF COLES CREEK

NATCHEZ TRACE PARKWAY

CLAIBORNE AND JEFFERSON COUNTIES, MISSISSIPPI

Prepared by the
U.S. Department of Transportation
Federal Highway Administration
Eastern Federal Lands Highway Division

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Prepared for the
U.S. Department of the Interior
National Park Service
Natchez Trace Parkway

Prepared pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (43 CFR 1500)

ABSTRACT

This Environmental Assessment (EA) addresses the plans of the National Park Service (NPS) to perform needed improvements to stabilize the stream banks along the Big Bayou Pierre River and the North Fork of Coles Creek. Both streams are experiencing severe bank erosion and are encroaching towards the Natchez Trace Parkway. If the erosion were allowed to continue, the stability of the motor road would eventually become threatened. The preferred alternative proposes to stabilize the stream banks through the installation of Longitudinal Peaked Stone Toe Protection (LPSTP). This work would include placing large quantities of riprap along the toe of the stream banks and constructing stabilization dikes approximately every 100 feet. Additional embankment work is required near Milepost 11 adjacent to the Parkway in order to repair an area affected by a landslide.

The National Park Service's goal in selecting a preferred alternative is to prevent further erosion of the stream banks and the potential future impact on the Parkway, without diminishing the visitor experience, the interpretive value and importance of the Natchez Trace Parkway, or Park resources.

This document determines which aspects of the proposed action have potential for social, economic, or environmental impact. It also identifies measures that may mitigate adverse environmental impacts. The review of a no action alternative is also presented. Public involvement and coordination/consultation with other Government agencies is summarized in this document.

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I. Purpose and Need For the Action

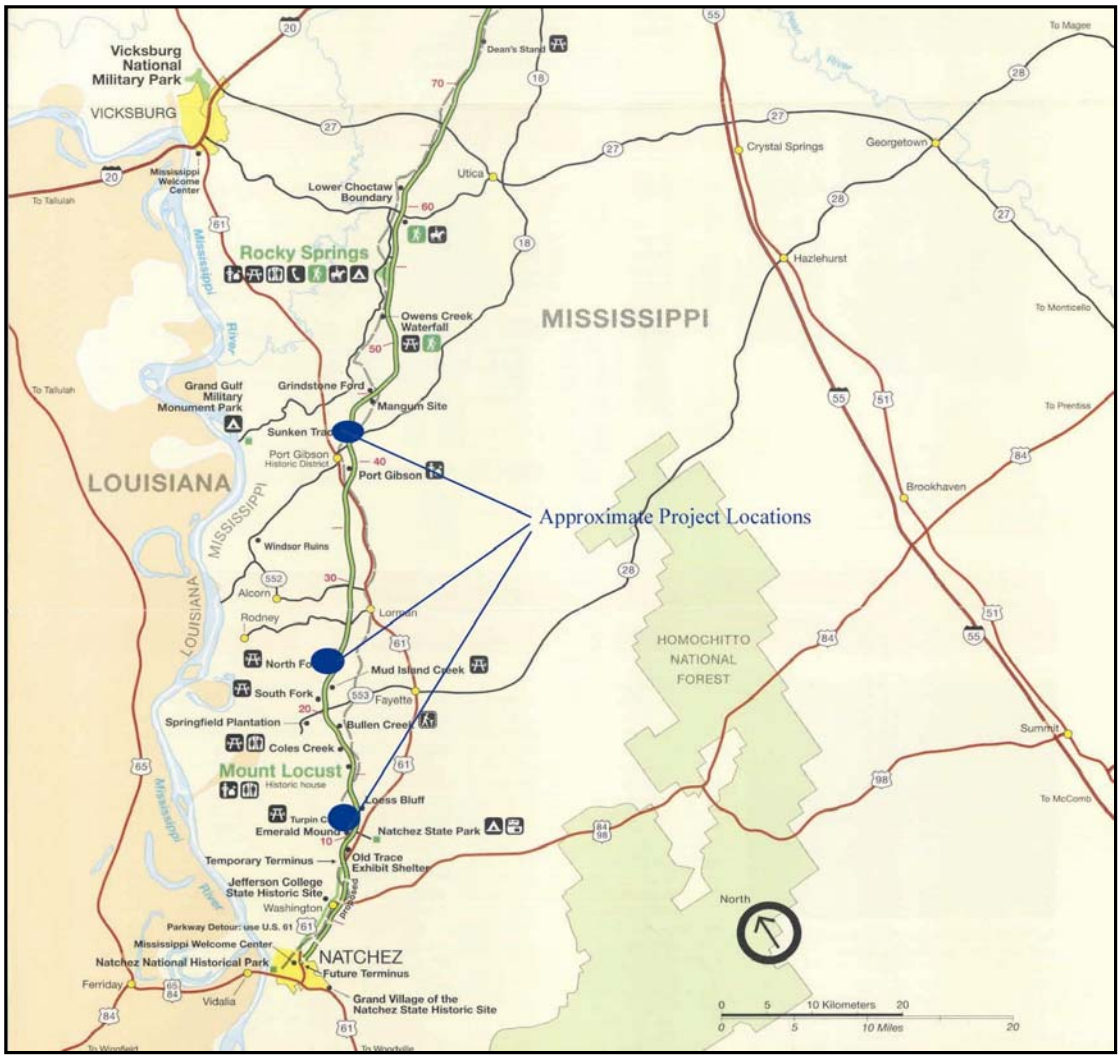
A. Project Location

The project area consists of three locations along the Natchez Trace Parkway in Claiborne and Jefferson Counties, Mississippi. The first is Big Bayou Pierre, which is located on the west side of the Parkway at approximately Mile Post 44, northeast of Port Gibson, Mississippi. A cornfield separates the Parkway from Big Bayou Pierre; however large masses of sediment continue to erode and fall into the river drawing it closer to the Parkway.

The second project site is North Fork of Coles Creek, which is located on the west side of the Parkway at approximately Mile Post 24, southwest of Lorman, Mississippi. A small picnic area is located at this site. The picnic area is substantially smaller than originally designed due to encroachment by the river.

The third project site is at MP 11, where a small slide has occurred along the embankment slope adjacent to the Parkway.

Location Map



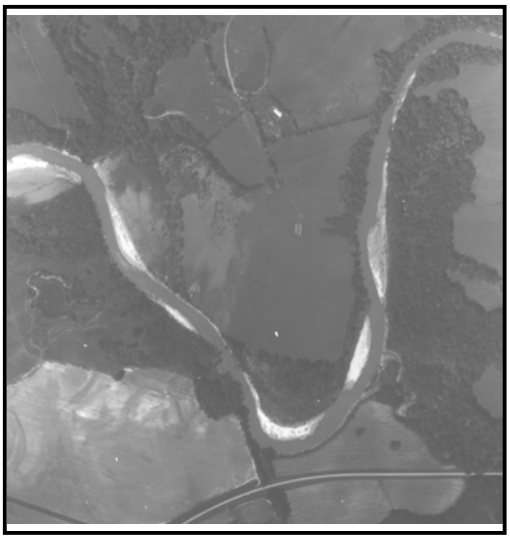
B. **Description of Proposed Action**

The stream banks at the Big Bayou Pierre and North Fork of Coles Creek would be stabilized, and miscellaneous work would be performed at Milepost 11 in Jefferson County, Mississippi. This work includes drainage pipe work and slope stabilization.

C. **Need for Proposed Action**

The National Park Service proposes to prevent further stream bank erosion along the Big Bayou Pierre and North Fork of Coles Creek, which are encroaching towards the Natchez Trace Parkway. The streams are continuing to meander towards the Parkway and erode the stream banks. Large sections of material including trees and soil routinely fall into the streams.

The North Fork of Coles Creek has eroded so much of the stream bank that it has substantially reduced the original area of the adjacent picnic site. If the stream banks continue to erode, the structural integrity of the Parkway would eventually be impacted.



Right: Aerial View of Big Bayou River Project Site. Natchez Trace Parkway is located at the bottom of the photo.

Below: Aerial View of North Fork of Coles Creek Project Site. The Natchez Trace Parkway and the Picnic Site are located at the top of the photo.

D. Decisions to be Made

The National Environmental Policy Act of 1969 (NEPA) requires consideration of the environmental effects of proposed Federal actions. This Environmental Assessment (EA) provides the required environmental, socioeconomic analysis for the proposed work. As part of the planning and analysis, this EA has been prepared to evaluate alternatives and options for accomplishing this work with the least impact to Park resources and Park visitors. The Eastern Federal Lands Highway Division of the Federal Highway Administration has prepared this EA for the National Park Service.

The National Park Service intends to explore alternatives for preventing further erosion of the stream banks and the potential future impact on the Parkway, without diminishing the visitor experience, the interpretive value and importance of the Natchez Trace Parkway, or Park resources. After the alternatives have been fully evaluated and the public has had an opportunity to review and provide comment on the proposed action, the National Park Service would issue a decision on how they would proceed.

E. Scoping and Issues

Issues and concerns related to stream bank stabilization were identified by the Park, State and other Federal agencies, and through similar NPS road projects. Issues specific to improving the stabilization of the stream banks relate to proposed construction methods and temporary access roads that could potentially affect area natural resources such as wetlands, soils, water quality, and special status species (threatened, endangered, species of concern, and designated critical habitats). The effects of the stream encroachment on the integrity of the Parkway, Parkway use, and Park operations are also of concern.

F. Issues Evaluated in Detail

Specific impact topics were developed to address potential natural, cultural, and social impacts that might result from the construction. These topics are derived from the issues identified above and address federal laws, regulations and orders, Natchez Trace Parkway management documents, and NPS knowledge of limited or easily impacted resources. They are used to focus the information presented and discussed in the affected environment and environmental consequences sections. A brief rationale for the selection of each impact topic is given below.

1. Biotic Communities

The 1969 National Environmental Policy Act (NEPA) calls for an examination of impacts on the components of affected ecosystems. NPS policy requires the protection of the natural abundance and diversity of all the Parkway's naturally occurring communities. Impacts to resources such

as soils, vegetation, and general wildlife are included in this topic because the proposed construction could potentially disturb stream, riparian and upland habitat.

2. **Special Status Species**

Section 7 of the Endangered Species Act directs all Federal agencies to use their authority in furtherance of the purposes of the Act by carrying out programs for the conservation of rare, threatened, and endangered species. Federal agencies are required to consult with the U. S. Fish and Wildlife Service (FWS) to ensure that any actions authorized, funded, and/or carried out by the agency does not jeopardize the continued existence of any listed species or critical habitat. Protection and preservation of special status species at the Park are of critical importance and would be discussed as part of this analysis.

3. **Water Quality**

NPS Management Policies (1988) require protection of water quality consistent with the Clean Water Act. Since the proposed action involves work in two major streams, it has the potential to impact water quality. This issue will be discussed further in the document.

4. **Wetlands**

Executive Order 11990 (Protection of Wetlands) requires an examination of impacts to wetlands. Field delineation of wetlands and open waters at both project sites was performed during the fall of 2000. Vegetation, soils, and hydrology were examined for evidence of wetland characteristics using the Cowardin Classification System for Classification of Wetlands and Deepwater Habitats (USFWS, 1979) and the methodology outlined in the Corps of Engineers Wetlands Delineation Manual (January, 1987). The study results indicated temporary and minor permanent impacts could occur to wetlands in the vicinity of Big Bayou Pierre and North Fork of Coles Creek.

5. **Cultural Resources**

The National Historic Preservation Act of 1966, the National Environmental Policy Act of 1969 (NEPA), the 1916 NPS Organic Act, NPS Management Policies, and NPS-28 require Federal agencies to consider the effects of their proposed actions on cultural resources. The proposed project has the potential to affect prehistoric and historic archeological resources, and features of the Park's cultural landscape. Protection and preservation of cultural resources at the Park are of critical importance and will be discussed as part of this analysis.

The NPS, in consultation with the Mississippi State Historic Preservation Officer, has determined that the Natchez Trace Parkway meets the criteria of eligibility for the National Register of Historic Places. In addition, the setting of the Natchez Trace Parkway is managed to ensure that Park visitors are afforded a continuous, serene and recreational travel experience, highlighted by the traditional rural landscapes along its route. Perpetuation of these aesthetic characteristics of the Parkway's cultural landscape is an important design consideration of the current project. Therefore, in accordance with 36 CFR 800, an assessment is required of the effect that the construction would have on the Parkway and other potential cultural resources in the project area.

G. **Definitions**

1. Temporary impacts - Impacts anticipated occurring during construction only. Upon completion of the construction activities, conditions are likely to return to those that existed prior to construction.

2. Short-term impacts - Impacts that may extend past the construction period, but are not anticipated lasting more than a couple years.

3. Long-term impacts - Impacts that may extend past the construction period, and are anticipated lasting more than a couple of years.

4. Negligible - Little or no impact (not measurable).

5. Minor - Changes or disruptions may occur, but does not result in a substantial resource impact.

6. Major - Easily defined and measurable. Results in a substantial resource impact.

H. **Permits**

The U.S. Army Corps of Engineers has regulated activities in the nation's waters since 1890. Until the 1960's, the primary purpose of the regulatory program was to protect navigation. Since then, as a result of laws and court decisions, the program has been broadened to encompass the full public interest for both the protection and utilization of water resources. Regulatory authority and responsibilities of the Corps of Engineers includes Section 404 of the Clean Water Act (33 USC 1344). This includes regulation of the discharge of dredged material into waters of the United States, including both navigable waters and adjacent wetlands. In addition, Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) is regulated by the

Corps of Engineers for activities in or affecting navigable waters. Since the actions proposed would impact waters which are considered waters of the United States, the proposed action is subject to U.S. Army Corps of Engineers review under the 404 regulatory program.

The U.S. Fish and Wildlife Service has advised the Federal Highway Administration that a Federally listed endangered species is present in Big Bayou Pierre River. An on-site field review of the project area was conducted on April 12, 2001 with the U.S. Fish and Wildlife Service to review potential impacts to special status species. All proposed work would be performed in compliance with U.S. Fish and Wildlife Service recommendations and regulations.

II. Alternatives

A. Description of Alternatives

The following is a description of the proposed alternatives, including the no action alternative, to prevent further erosion of the stream banks and future potential impacts to the Natchez Trace Parkway.

1. No Action Alternative

Under the No Action alternative, the streams would be permitted to erode the stream banks naturally. The streams would continue to encroach towards the Natchez Trace Parkway, and eventually impact the structural integrity of the Parkway. No substantial improvements would be performed other than in accordance with routine maintenance operations.

2. Build Alternative (Preferred Alternative)

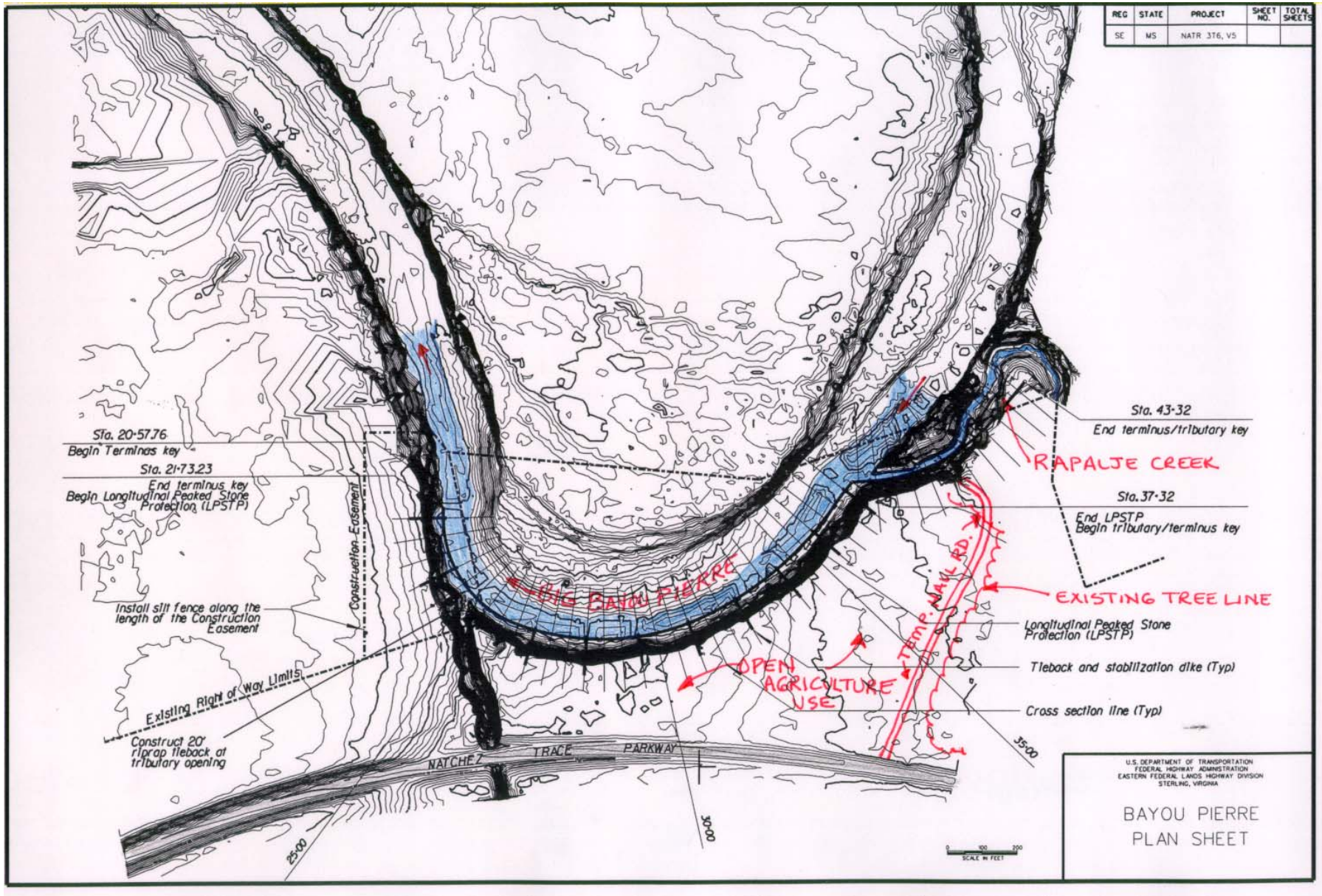
The build alternative proposes to stabilize two stream banks through the installation of Longitudinal Peaked Stone Toe Protection (LPSTP). The two stream banks are located along the Natchez Trace Parkway at approximately MP 44 (Big Bayou Pierre) and at approximately MP 24 (North Fork of Coles Creek). This work would include placing large quantities of riprap along the toe of the stream banks and constructing stabilization dikes approximately every 100 feet. Construction access to the site would be permitted at a maximum of two locations in order to minimize disturbance in the area. The embankment slide at MP 11 would be filled in and stabilized with vegetation to prevent future impact to the Parkway.

A Class C riprap mixture is proposed for use in stream banks because it is more open graded, with smaller stones to trap sediments. The following table depicts the 400 lb gradation:

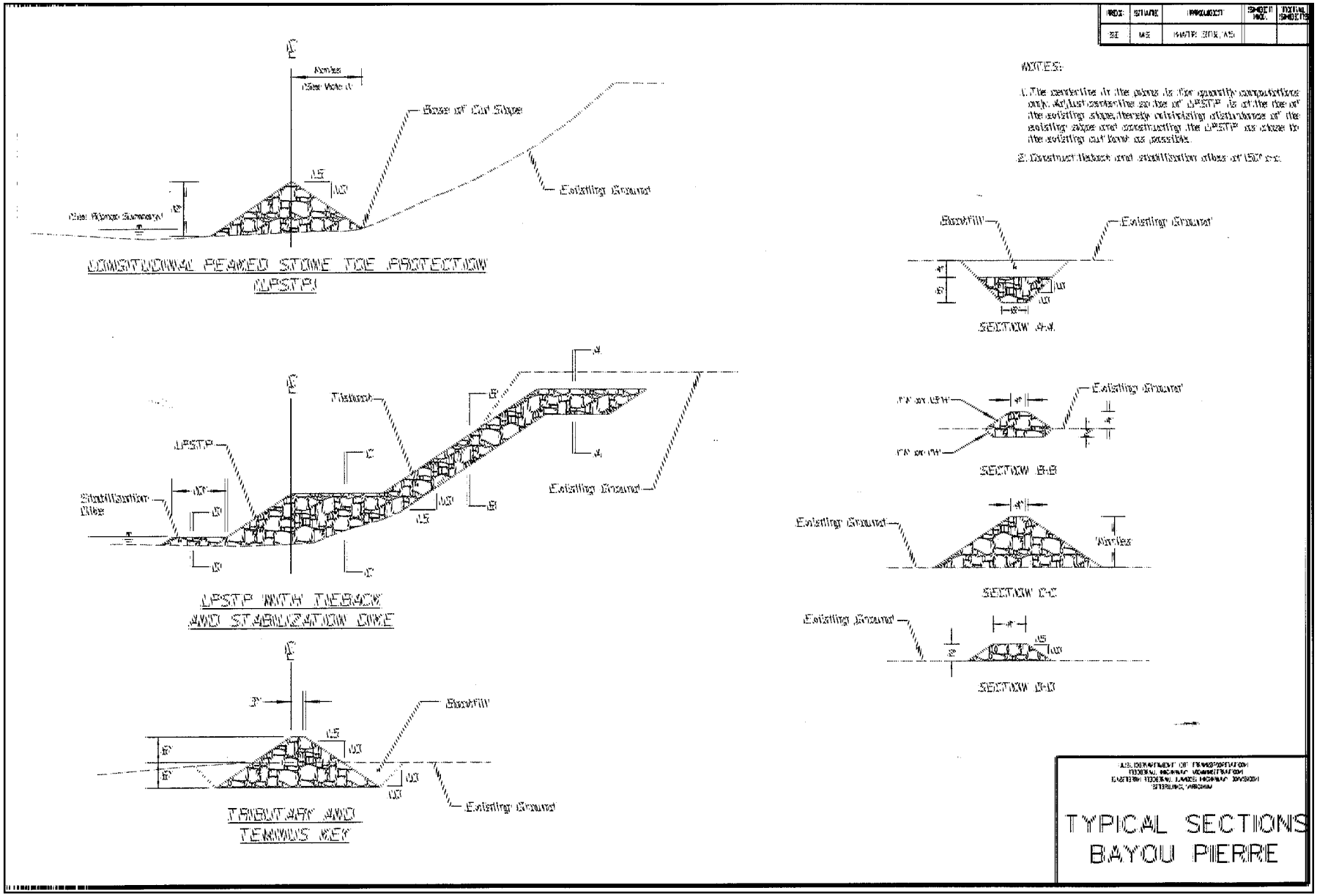
Class C Mixture	
Weight (lbs)	% Fines
400	100%
250	70% - 100 %
100	50% - 80%
30	32% - 58%
5	15% - 34%
1	2% - 20%
<1/2 max diam.	0% - 10%

Approximately 30,000 tons and 2,500 tons of riprap would be placed along the stream banks of Big Bayou Pierre and North Fork of Coles Creek, respectively. The following drawings provide details on the proposed typical sections for each of the rehabilitation sites.

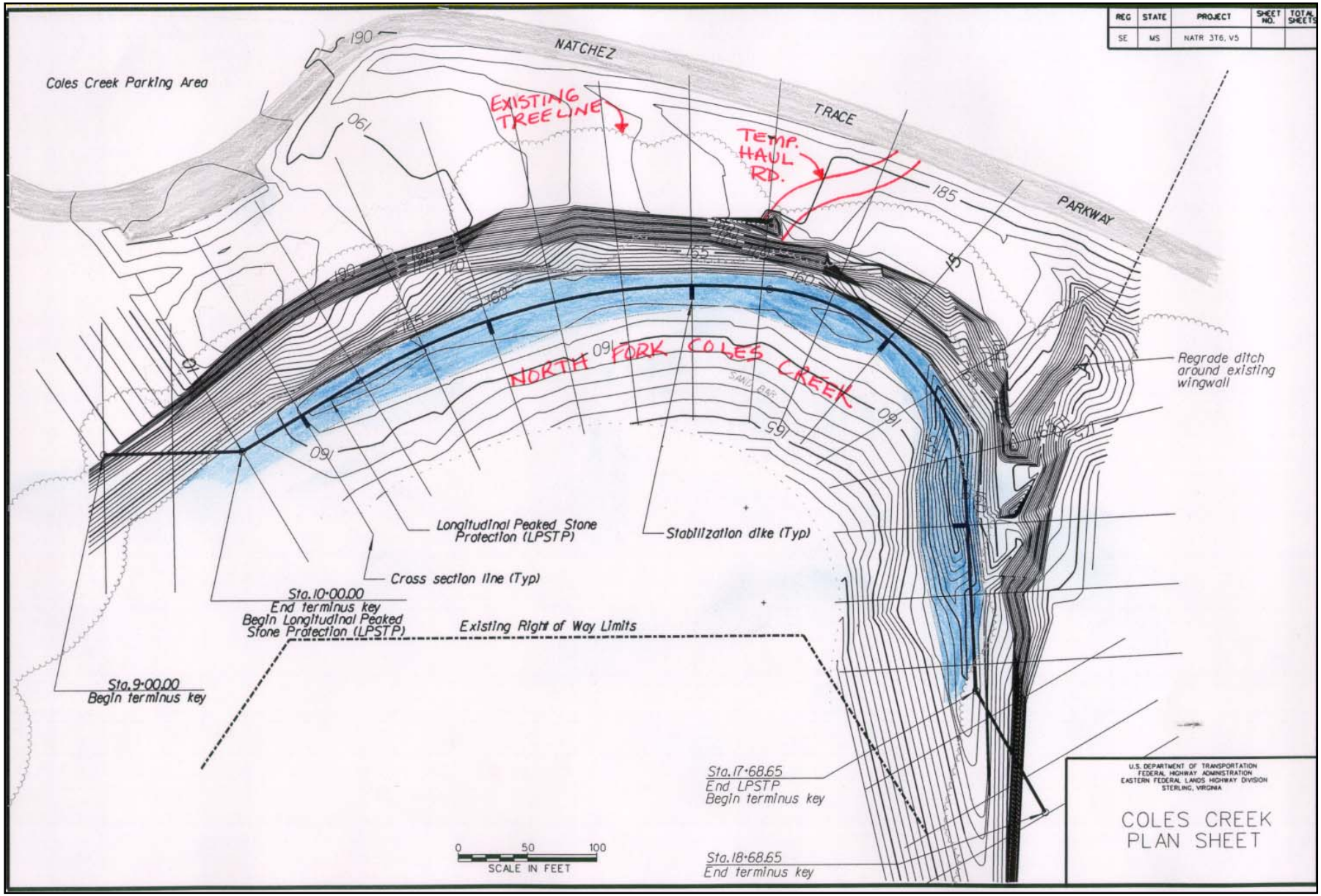
Site Plan for Big Bayou Pierre Stream Bank Stabilization



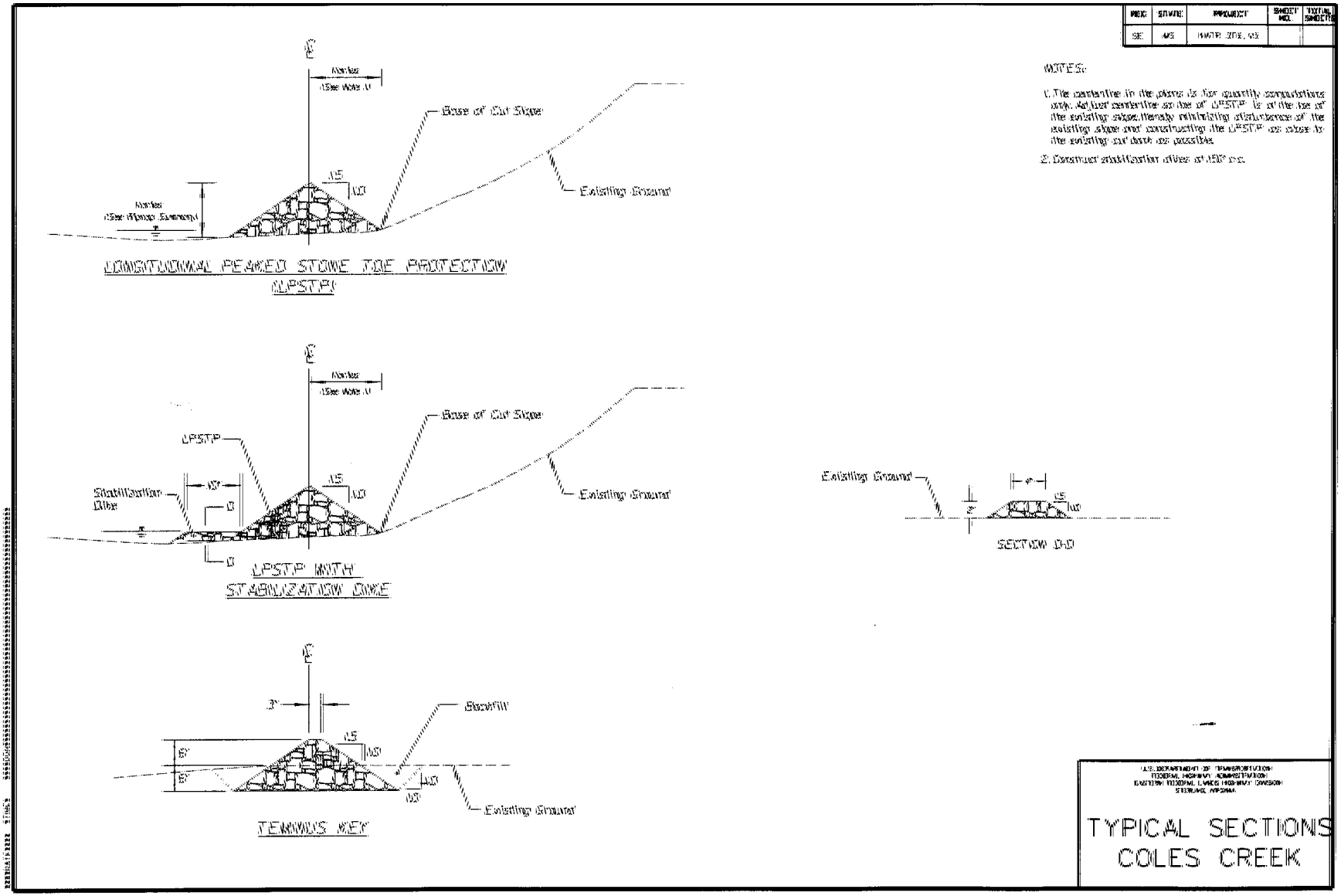
Typical Section for Big Bayou Pierre Stream Bank Stabilization



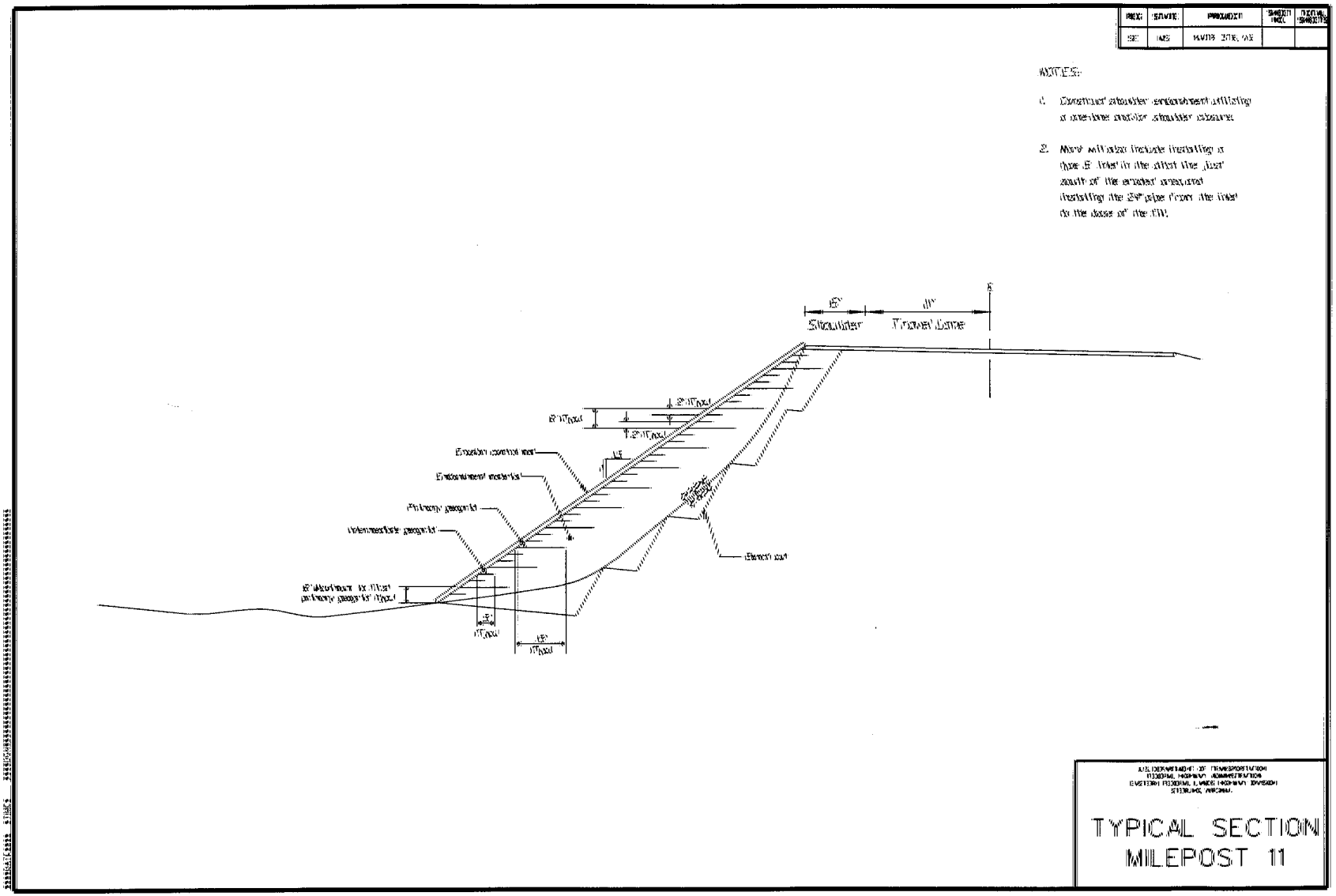
Site Plan for North Fork Coles Creek Stream Bank Stabilization



Typical Section for North Fork Coles Creek Stream Bank Stabilization



Typical Section for Slide Repair at MP 11



B. Comparison of Alternatives

The following chart summarizes and compares the likely results of implementing the No Action Alternative and the Preferred Alternative as they relate to the environment.

Factor	No Action Alternative	Build Alternative
Wetlands	No change from the existing conditions is anticipated.	Approximately 2.4 acres of the stream channels and banks would be filled in with riprap.
Vegetation	Vegetation would continue to fall into stream as the earth is continually eroded beneath it.	Some vegetation would be removed during construction in order to access the site. After construction, all disturbed areas would be revegetated. No trees over 12 in. cal. would be removed
Protected Species	No change from the existing conditions is anticipated; however, long-term impact to the habitat area of the Bayou Darter may occur due to continued stream degradation.	Moderate impact to the Bayou Darter may occur during construction; however the impact can be minimized through mitigation. Coordination with the FWS would be ongoing. There would be a long term, significant benefit for the Bayou Darter, due to stabilization of the stream bank which results in a significant reduction in the volume of sediment currently entering the stream (per USFWS).
Air Quality	No change from the existing conditions is anticipated.	Minor temporary impacts during construction are anticipated.
Soils/Geology	Embankment along the streams would continue to erode and be lost into the streams.	The amount of eroded material entering the streams would decrease.
Water Quality	Sediment and vegetation would continue to fall into the stream and affect water quality.	Water quality may improve since the amount of sediment and debris entering the stream would decrease.
Birds, Fish & Wildlife	No change from the existing conditions.	Birds, Fish & Wildlife may flee the project area temporarily during construction due to noise.
Cultural Resources	The historic landscape of the Natchez Trace Parkway may become altered in this area if the stream continue to encroach towards the Parkway.	Some potential impacts may exist to archeological resources; however, these impacts have been minimized through data recovery and analysis by the SEAC. If any additional artifacts are encountered during excavation operations, construction would be halted immediately.
Noise	No change from the existing conditions is anticipated.	Minor temporary impacts during construction are anticipated.
Visitor Use Recreation	No change from the existing conditions is anticipated.	No change from the existing conditions is anticipated; however temporary impacts would occur since the picnic site and parking area near Coles Creek would be closed to visitors during construction.
Land Use	The adjacent area is currently used for farming and picnicking. These areas may be minimized or lost as the stream moves towards the Parkway.	The existing buffer between the streams and the Parkway would be maintained and preserved for farming, picnicking, or other activities.
Transportation	No immediate impact is anticipated; however future impacts to the Parkway may occur.	No impacts to the Parkway are anticipated. The Parkway would remain open to traffic during construction.
Economics	No change from the existing condition is anticipated.	No change from the existing condition is anticipated.
Cumulative Impacts	No cumulative impacts occur as the result of the No Action Alternative	No cumulative impacts are anticipated under the Build Alternative.

III. Affected Environment

A. General Environmental Setting

The Natchez Trace Parkway (NATR) is approximately 440 miles in length, and crosses three states on its route from Natchez, Mississippi to Nashville, Tennessee. The project area is located in southwestern Mississippi, in a rural setting with primarily an agricultural landscape.

The total acreage of the Park includes 51,680.64 acres in Federal land and 69.51 acres in non-Federal land, for a total acreage of 51,750.15 acres.

The climate of southwestern Mississippi is generally mild with moderate temperature extremes. Winter is usually cold and damp with occasional warm periods. Spring and autumn are mild and warm.

B. Natural Resources

1. Vegetation

Generally, cotton fields, sparsely vegetated colluvial material at the toe-of-slope along Big Bayou Pierre and mixed hardwood-dominated floodplain forest (predominantly oak, elm, and maple) dominate upland areas. Major species in the forested community include water oak, Shumard's oak, cherry oak, American elm, southern sugar maple, box elder, and pecan. Subcanopy dominants include sugarberry, choke cherry, ironwood, and two-winged silverbell. The shrub layer is dominated by ironwood, two-winged silverbell, chokeberry, and winged elm. The herb layer is sparse to moderately vegetated and dominated by giant cane, cross vine, and Japanese honeysuckle. The vine layer is dominated by poison ivy, Japanese honeysuckle, muscadine grape, and greenbrier. Upland communities are dominated by facultative to facultative-wetland species and met the hydrophytic criterion.

Upland areas at the base of the slopes along Big Bayou Pierre are sparsely vegetated with ragweed, crab grass, and other opportunistic species. Kudzu is aggressively colonizing most of the bluff along the river.

Upland areas are dominated by open, maintained fields, sparsely vegetated colluvial material at the toe-of-slope along the North Fork of Coles Creek, a narrow bench of mixed hardwood-dominated floodplain forest, floodplain scrub-shrub/giant cane complex and upland forest. The forested upland communities are well defined along the creek bluff and well-drained floodplain.

2. Threatened and Endangered Species

The Bayou Darter (*Etheostoma rubrum*) is endemic to the Bayou Pierre system in western Mississippi. Because of its limited natural range, and especially because of ongoing habitat degradation in Bayou Pierre and its tributaries, it is listed as "threatened" under the Endangered Species Act, and as "endangered" by the state of Mississippi. No special status species have been identified within the North Fork of Coles Creek.

3. Birds, Fish, and Wildlife

Parkland provides habitat for a wide variety of wildlife species. Principal mammals include deer, rabbits, squirrels, foxes, opossums, and raccoons. A variety of birds are also found along parklands. These include mourning doves, mockingbirds, towhees, indigo buntings, blue jays, cardinals, brown thrashers, red-bellied woodpeckers, quail, turkeys, and a variety of warblers, vireos, woodpeckers, and ducks. Reptiles and amphibians such as snakes, turtles, and salamanders also occur within the study area.

4. Wetlands

The National Wetland Inventory (NWI) map shows mapped wetlands as occurring within the Big Bayou Pierre project area. Mapped wetlands are shown as occupying the main channel of Big Bayou Pierre and the adjacent flood plain at or below the 100-foot contour. Mapped wetlands include PFOIA, PFO/SSIA, R2BBA and R2OWH Cowardin classifications.

Wetland areas include palustrine forested and emergent communities, as well as unvegetated to sparsely vegetated perennial and intermittent, riverine Cowardin classes. An emergent fringe along the main creek through the Big Bayou Pierre project area dominates emergent wetlands. Species include punctate knotweed, redtop, and crab grass. Vegetated wetlands occupy a narrow (5 to 15 foot wide) fringe adjacent to the Big Bayou Pierre River. Forested wetlands tend to be dominated by an oak-elm community type, with American elm, water oak, Shumard's oak, and sugarberry in the canopy.

The NWI map shows most of the wetlands at the North Fork of Coles Creek site as temporarily flooded, palustrine deciduous forested wetlands (Cowardin classification PFOIA).

Wetland areas around the North Fork of Coles Creek include palustrine emergent communities, as well as unvegetated to sparsely vegetated perennial and intermittent riverine Cowardin classes. Emergent wetlands along the main creek are dominated by an emergent fringe of persistent and non-persistent vegetation, including crab grass, bushy bluestem, and common sneezeweed. Vegetated wetlands occupy a narrow (5 to 25 foot wide) fringe adjacent to the creek and in some areas extended upslope of the creek's edge.

C. Physical Environment

1. Air Quality

The State of Mississippi monitors for PM10 particulates, ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), lead, and acid precipitation. The State does not monitor for nitrogen oxide (NO_2). According to the Mississippi Department of Environmental Quality, Office of Pollution Control, the State has been in attainment for all criteria pollutants since the inception of the monitoring program. Attainment indicates that a criteria air pollutant meets acceptable health-based levels of the national ambient air quality standards (USEPA 2001).

2. Water Quality/Hydrology

The first project site is located on the Big Bayou Pierre and its tributary stream, Rapalje Creek. The watershed for Big Bayou Pierre is significantly greater than five square miles. According to USGS topographic maps for the project area, one intermittent stream flows into Big Bayou Pierre near the western terminus of the project area.

The second site is located within the North Fork, Coles Creek watershed and northern project area is bordered by the North Fork of Coles Creek, which has a watershed area that exceeds five square miles. The stream system would not be considered a headwater system. According to USGS topographic maps for the project area, one intermittent mapped stream is located on the eastern edge of the project area.

Listed hydric soils for both sites are described as seasonally flooded, with a high water table within two feet of the surface, in a normal year. Backwater and over bank flooding may contribute to wetland hydrology, provided flooding occurs for long to very long periods of time.

Water quality criteria for the State of Mississippi, adopted November 12, 1974, specified general and minimum conditions followed by specific water quality criteria based upon use. The parameters for which criteria were established include dissolved oxygen, pH, temperature, bacteria, specific conductance, dissolved solids, taste and odor, phenolic compounds, and toxic substances. The streams along the Natchez Trace Parkway are classified to meet the standards for fish and wildlife, i.e. "intended for fishing and for propagation of fish, aquatic life, and wildlife." Although comparative or analytical data are not available for this assessment, it is assumed that the quality of these waters meets or exceeds the state criteria.

3. Soils/Geology

The project area is located within the Loess Hills physiographic region of Mississippi, in an area identified as occurring within the Miocenne age Catahoula geologic formation. The Big Bayou Pierre site is characterized by the low-relief floodplains and adjoining hills. A broken pattern of narrow valleys and ridges and level strips of bottomland along the creeks and rivers characterize the North Fork of Coles Creek site.

According to the Claiborne County soil survey, the Big Bayou site lies within the Collins-Falaya-Calloway association found along the floodplains and associated loessal uplands of the Big Bayou Pierre. The predominant soil types near Big Bayou Pierre are Adler silt loam, Collins silt loam, Memphis silt loam, mixed alluvial land, Natchez silt loam, and sandy alluvial land.

According to the Jefferson County soil survey, the North Fork of Coles Creek site lies within the Memphis-Loring-Providence association, which is characterized as well drained to moderately well drained, steep, silty soils that have a fragipan. The predominant soil types near the North Fork of Coles Creek are Bruno sandy loam, Memphis silt loam, and Natchez silt loam.

4. Noise

The area is primarily serene with the majority of noise being generated by the stream, birds, and other wildlife. While traffic on the Parkway is generally low, vehicular traffic also contributes to higher noise levels.

D. Socio-Economic Environment

The project site is entirely on National Park Service property; however, the primary industry outside of the Park is agricultural. Cattle are raised; and cotton, corn, and timber are produced. Under cooperative agreements, the Park leases portions of its property to local farmers which plant and harvest crops on the land. This practice helps the NPS maintain the agricultural landscape of the Parkway. The NPS does not charge any fees for entering the Park; however some revenue is obtained from the agricultural leases.

E. Cultural Resources

The Natchez Trace Parkway was established on May 18, 1938 to commemorate the historical significance of the old Natchez Trace, a primitive trail stretching some 500 miles through the wilderness from Natchez, Mississippi to Nashville, Tennessee. The Natchez Trace Parkway was designated as the corridor for the Natchez Trace National Scenic Trail in 1983 and as a National Scenic Byway-All American Road in 1995.

From May 9 through May 14, 2001, Mr. Rolando L. Garza, of the Southeast Archeological Center, conducted a systematic shovel test survey near the Bayou Pierre project area. Twenty shovel test units were excavated at 20 m intervals. The shovel test units were placed between 5 and 10 m from the edge of the cut bank. There were no cultural materials, historic or prehistoric, recovered in the shovel test units. The walls of the 20 to 30 m high cut bank were visually inspected. Active erosion on the cut bank was evident. The homogenous dark yellowish brown matrix appeared to continue all the way down to the base of the cut bank. No cultural lenses or features were noticed in the cut bank. Mr. Garza concluded that, "the area of potential impact associated with the Bayou Pierre Stabilization Project is void of any intact significant cultural resources."

The NPS will be conducting a similar type of survey at the Coles Creek project site this summer; however, it is not anticipated that any significant intact cultural resources will be recovered at this location either. Coordination with the State Historic Preservation Officer is ongoing.

1. Archeological Resources

   No known or previously identified archaeological resources exist within the proposed construction area.

2. Historic Resources

   No historic resources are known to exist within the proposed construction areas.

F. Visitor Use and Experience

Natchez Trace Parkway provides opportunities for recreational activities such as: camping, picnicking, hiking, walking, auto tours, swimming, boating, horseback riding, exhibits, bicycling, an interpretative slide program, fishing, running and jogging, Ranger talks and seasonal crafts festivals and demonstrations.

In 1999, the total number of recreational visits along the Parkway was approximately 6,392,961.

IV. Environmental Effects

A. General Environmental Setting

1. No Action Alternative

No change from the existing conditions is anticipated.

2. Build Alternative

No change from the existing conditions is anticipated.

3. Conclusions

No impact to the general environmental setting is anticipated under either alternative. No impairment to the Park's general environmental setting would occur.

B. Natural Resources

1. Vegetation

a. No Action Alternative

The existing species abundance would remain relatively the same; however, existing vegetation would continue to be lost as the adjacent stream banks continue to erode.

b. Build Alternative

The existing species abundance would remain relatively the same; however, some vegetation would be disturbed during construction in order to permit construction access to the sites. Any areas disturbed by construction activities would be revegetated with native species. During construction, the staging area would most likely be temporarily located in the adjacent NPS-owned field near Big Bayou Pierre. This would result in some disturbance to vegetation in the field, which is currently maintained as a cotton field. The specific staging area location and limits would be minimized and require prior approval by the Project Engineer.

c. Conclusions

Under either alternative, minor impacts to vegetated areas would result. Under the Build Alternative, any areas disturbed by construction activities would be reseeded and replanted. Limitations would be placed on removal of trees over 12-inch caliper for access road construction. The stream banks currently

have no large or significant vegetation within the work area due to the continual erosion and instability of the banks. No impairment to the Park's vegetation would occur.

2. Threatened and Endangered Species

a. No Action Alternative

Under the No Action alternative, the Bayou Pierre stream channel would continue to degrade, thereby reducing the total area of suitable habitat for the Bayou Darter. This reduction in habitat area could further endanger the Bayou Darter.

b. Build Alternative

The Build Alternative would slow down the rate at which the Bayou Pierre is degrading and reduce the amount of erosion, which is occurring in the stream. It is projected to improve the long-term habitat conditions for the Bayou Darter.

In cooperation with the US FWS and as a result of funding provided by the NPS-FHWA, the Mississippi Museum of Natural Science would be conducting a survey of the Lower Bayou Pierre for Bayou Darters (Etheostoma rubrum) in the late summer or early fall of 2001. The objective is to conduct standardized sampling for bayou darters along the lower reach of Bayou Pierre. The survey would focus specifically on the stream reach extending upstream and downstream from the area of the stabilization activity (eg. Willows downstream to Hwy 61). According to the US FWS, it is likely that some habitat would be temporarily displaced during construction, but equivalent habitat would redevelop in other areas within a reasonable time period and stream sedimentation would be reduced.

c. Conclusions

Either alternative could result in potential impacts to the Bayou Darter; however, in the long term (and after consultation with the US FWS) it has been determined that the Build Alternative would actually improve habitat conditions for the threatened species. No impairment to threatened or endangered species within the Park would occur.

3. Birds, Fish, and Wildlife

a. No Action Alternative

There would be no additional impacts to the wildlife species and aquatic habitats of the study area associated with this alternative.

b. Build Alternative

The temporary disturbance associated with construction may cause some animals and birds to temporarily flee the project area. However, it is assumed that once construction is complete, all species, which currently inhabit the area, would return. No long-term adverse impacts to birds, fish, or wildlife species are anticipated under this alternative.

c. Conclusions

No long-term adverse impacts to birds, fish, or wildlife species are anticipated under either alternative. The temporary, short-term impacts associated with the build alternative are assumed to be negligible or minor. No impairment to the Park's birds, fish, or wildlife would occur.

4. Wetlands

a. No Action Alternative

The No Action alternative would have little impact on wetlands located within the study area. The stream channel would continue to degrade and the stream bank would continue to erode.

b. Build Alternative

Under the Build Alternative, approximately 30,000 tons of riprap would be placed along the two stream banks and in the stream channels filling approximately 11,600 square yards (2.4 acres) of the riverine systems. In order, to minimize disturbance of the existing slope, the project centerline would be adjusted in the field so that the toe of the LPSTP is at the toe of the existing slope and the LPSTP is as close to the existing cut bank as possible. If this alternative were selected, the preparation of a Wetland Statement of Findings would be required.

c. Conclusions

The Build Alternative would result in some filling of the stream channel; however it is likely that through natural deposition of sediment, the channel would realign itself to the west to create equivalent habitat area on an existing sandbar, thereby resulting in a no net loss of wetlands. The new stream bank created adjacent to the placed riprap is expected to support a more diverse aquatic plant and animal community then that present prior to the stabilization. The No Action alternative would do nothing to prevent further stream degradation and erosion. No impairment to the Park's wetlands would occur.

C. **Physical Environment**

1. Air Quality

a. No Action Alternative

Air quality levels would remain essentially in the same condition as they are under present conditions.

b. Build Alternative

Air quality levels would remain essentially in the same condition as they are under present conditions. The temporary air quality impacts from construction are not expected to be significant. Construction activities would be conducted in accordance with the Federal Highway Administration's *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, 1996;* and would require compliance with all applicable local, state, and federal regulations. After construction, air quality levels are expected to return to normal since this alternative does not add new sources of air pollution. Therefore, there are no long-term air quality impacts associated with this alternative.

c. Conclusions

During construction, temporary, minor impacts to air quality levels may occur under the Build Alternative. However, no long-term impacts are anticipated. The No Action alternative would not result in any short or long-term impacts to air quality. No impairment to the Park's air quality would occur.

2. Water Quality/Hydrology

a. No Action Alternative

No change from the existing conditions is anticipated; however, sediment and debris would continue to fall into the streams; thereby potentially decreasing water quality in the streams. The streams would likely continue to meander and encroach towards the Parkway.

b. Build Alternative

Potential short-term impacts to water quality due to erosion may exist during construction; however, best management practices would be utilized to minimize these potential impacts. Should this alternative be selected, a sediment and erosion control plan, including the use of best management practices, would be prepared

by the Federal Highway Administration and included in the final construction plans. Under the Build Alternative, water quality may actually improve slightly as a result of the bank stabilization since less sediment and debris would be entering the stream.

c. Conclusions

Under either alternative, the potential for decreased water quality exists; however, under the Build Alternative, this impact would be temporary and water quality may actually improve slightly as a result of the bank stabilization since less sediment and debris would be entering the stream. No impairment to the Park's water quality or hydrology would occur.

3. Soils/Geology

a. No Action Alternative

Soils will continue to be lost into the stream through the erosion of the stream banks.

b. Build Alternative

Under the Build Alternative, the rate at which soil is lost due to erosion of the stream banks is anticipated to decrease. The LPSTP system is designed to allow sediment to fill in along the stream banks behind the riprap, thereby preventing further erosion.

c. Conclusions

The no action alternative would perpetuate the loss of soils through erosion to a greater degree than the build alternative. No impairment to the Park's soils or geology would occur.

4. Noise

a. No Action Alternative

No change from the existing conditions is anticipated.

b. Build Alternative

Existing noise levels would temporarily increase during construction. Park visitors and hikers in the immediate vicinity of the project area would be subject to the noise pollution generated from construction. Noise levels are not expected to significantly increase.

c. Conclusions

Under the Build Alternative, minor increases in noise levels would occur temporarily during construction. After construction noise levels would be expected to return to normal levels. No impairment to noise levels within the Park would occur.

D. Cultural Resources

1. Archeological Resources

Potential impacts on cultural resources must be addressed under the provisions for assessing effects outlined in 36 CFR, par 800, regulations issued by the Advisory Council on Historic Preservation implementing section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470 et seq.). Under the "Criteria of Effect" (36 CFR Part 800.9[a]), Federal undertakings are considered to have an effect when they alter the character, integrity, or use of a cultural resource, or the qualities that qualify a property for listing on the National Register of Historic Places.

The National Park Service would consult with the Mississippi State Historic Preservation Office (SHPO) to ensue that the NPS operation, management, and administration provide for the site's cultural resources in accordance with the intent of National Park Service policies and with section 106, 110, and 111 of the NHPA, as stated in the 1990 programmatic agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers. Under stipulation D of the programmatic agreement, all undertakings that are not considered programmatic exclusions, or are not included in the plans reviewed under the former programmatic memoranda of agreement, would be reviewed in accordance with 36 CFR, part 800 and NPS-28, *Cultural Resource Management*.

a. No Action Alternative

Under the No Action Alternative, it is not anticipated that archeological resources would be disturbed or lost.

b. Build Alternative

Based on the limited proposed construction activities, the NPS-Natchez Trace Parkway staff has determined that the proposed work should have no adverse effect on archaeological resources since the earth excavation into previously undisturbed soils is limited and the vast majority of the work is placement of stone fill adjacent to the severely eroded stream banks.

c. Conclusions

The Build Alternative is not anticipated to have an adverse effect on archaeological resources. No impairment to the Park's archeological resources would occur.

2. Historic Resources

a. No Action Alternative

No historical resources would be disturbed or lost under the No Action Alternative.

b. Build Alternative

No historical resources would be disturbed or lost under the Build Alternative.

c. Conclusions

The proposed action is not anticipated to have an adverse effect on historic resources. No impairment to the Park's historic resources would occur.

E. **Socio-Economic Environment**

1. No Action Alternative

The use of Federal funds for construction would not be required. A portion of the adjacent upland area may be lost in the future as a result of erosion and unavailable for leased farming activities.

2. Build Alternative

No change from the existing conditions is anticipated.

3. Conclusions

No impact to the socioeconomic environment is anticipated under either alternative. No impairment to the Park's socio-economic environment would occur.

F. Visitor Use and Experience

1. No Action Alternative

The adjacent streams and rivers are critical links that allow for visitor use and enjoyment of the Parkway. The encroachment of the streams on the Parkway threatens the future existence of the Parkway. Failure to take action in the foreseeable future could result in deterioration of the motor road and the eventual structural failure of one or more sections of the Parkway. Long-term, temporary closures to repair these sections could affect visitor use.

The picnic area that is located near the North Fork of Coles Creek has been significantly reduced in size over the years, and is likely to be lost if the stream continues to erode and encroach towards the Parkway.

2. Build Alternative

No change from the existing conditions. After construction, the buffer area between the streams and the Parkway would continue to be available for farming, picnicking, or other activities. However, temporary impacts would occur during construction. The picnic site and parking area at North Fork of Coles Creek would be closed to visitors during construction.

3. Conclusions

The No Action alternative, visits to the Park remain unchanged. Under The Build Alternative the experience would remain unchanged. No impairment to visitor use and experience within the Park would occur.

G. Energy Requirements and Conservation

Neither alternative would have a significant impact on energy resources or conservation issues.

H. Natural or Depletable Resources

The use of some natural resources would be required under the Build Alternative in order to complete construction operations, however no natural resources would be depleted. The quantity of materials in comparison to those readily available would be negligible.

I. Cumulative Impacts

Cumulative impacts are those impacts on the environment that result from the incremental effect of the project when considered with interrelated past, present, and reasonably foreseeable future projects. This Stream Bank Stabilization Study coincides with efforts to complete the unfinished portions of the Parkway near Jackson and Natchez, several Parkway rehabilitation projects, and a study to construct a multi-use trail at the southern end of the Parkway.

1. No Action Alternative

   The No Action Alternative would have little impact on future Park development plans. Under the No Action Alternative, the Park as a whole would remain relatively unchanged.

2. Build Alternative

   The total cumulative impacts associated with this project are anticipated to be minor considering the limited extent of the proposed construction. Impacts associated with the removal of vegetation and water quality would not be significant, nor would the short-term disruption to the wildlife species. This alternative would not prohibit or disrupt plans for completing the unfinished segments of the Parkway, or performing any needed repairs along existing sections.

3. Conclusions

   The No Action Alternative maintains the present condition of the Park, with the exception of increased future maintenance expenditures. Under the Build Alternative the effects are minimal, and any adverse impacts would only occur during construction and are not likely to continue once construction is complete.

J. Irreversible and Irretrievable Commitment of Resources

To date, approximately $2,700,000 in Federal Lands Highway Program funds, has been set aside for planning, design, and construction. Should design and construction of the Build Alternative occur, these resources would be consumed. In addition, soil loss due to erosion would be greater under the No Action Alternative than the Build Alternative.

K. Unavoidable Adverse Environmental Effects

No significant adverse environmental effects are anticipated. The filling of stream channel with riprap stone bank stabilization material would have a temporary adverse environmental effect, however the long term environmental benefits of the proposed action far outweigh the temporary adverse effects.

L. Local Short-Term Uses and Maintenance/Enhancement of Long-Term Productivity

Immediate maintenance costs are unaffected by the proposed action. The long term maintenance and safety cost to the Parkway could be very significant in an adverse manner, should these two streams continue to erode toward the Parkway and the Parkway collapses into the stream channels.

M. Compliance with Environmental Requirements

The Natchez Trace Parkway currently operates under the direction of the approved 1987 General Management Plan/Environmental Assessment for Natchez Trace Parkway (GMP/EA). Management objectives identified within the GMP direct the maintenance and upgrading of roadways and associated bridges in order to provide for a positive visitor experience and to ensure effective parkway operations. However, construction and maintenance must be compatible with and sensitive to the resources for which the parkway was set aside.

The 1982 Surface Transportation Assistance Act established the Federal Lands Highway Program (FLHP), which distributes funds from the federal motor fuel tax revenues for the construction and rehabilitation of federal roads, including roads in units of the National Park System. The NPS has developed a plan for a long-term program of road improvement and maintenance with the intent to preserve and extend the surface life of principal park roads, and improve their safety. The FHWA coordinates the design, construction, and maintenance of these roads in cooperation with the NPS. As intended by the Act, the FHWA is designing the proposed stream bank stabilization project and construction would occur using 2001 FLHP funds.

The proposed action to improve stream bank stabilization along the Big Bayou Pierre River and the North Fork of Coles Creek is entirely consistent with the Natchez Trace Parkway management documents.

1. *National Environmental Policy Act (NEPA)*

This Environmental Assessment (EA) and resultant decision documents provide disclosure of the decision-making process and potential environmental consequences of the alternatives. This EA will be available for a 30-day public review and comment period, after which the NPS will decide if the proposed action is significant enough to prepare an Environmental Impact Statement (EIS). If an EIS is not required, the NPS's Southeast Regional Director may sign a Finding of No Significant Impact (FONSI). Together this EA and the FONSI would conclude the NEPA compliance for this project.

All comments and/or questions can be directed to:

Superintendent
National Park Service
2680 Natchez Trace Parkway
Tupelo, MS 31217-4399

Telephone: 662-680-4000

2. *Endangered Species Act of 1973*

Section 7 of the Endangered Species Act directs all Federal agencies to use their authority in furtherance of the purposes of the Act by carrying out programs for the conservation of rare, threatened, and endangered species. Federal agencies are required to consult with the U. S. Fish and Wildlife Service (FWS) to ensure that any actions authorized, funded, and/or carried out by the agency does not jeopardize the continued existence of any listed species or critical habitat. Informal consultation pursuant to the Endangered Species Act was initiated in February, 2001, when a letter was sent to the U. S. Fish and Wildlife Service inquiring whether any Federal or state listed or candidate threatened or endangered plant or animal species or any other special status plant or animal species occur in the project area. A field review of the project area was held with personnel from the FWS, the NPS, and the FHWA on April 12, 2001. The FWS responded with the determination that the proposed action "is not likely to affect Federally listed or proposed species."

3. *Clean Water Act of 1972*

This Act seeks to restore and maintain the chemical, physical, and biological integrity of the nation's water by a variety of means. Section 404 of the Act directs wetlands protection by authorizing the Army Corps of Engineers to prohibit or regulate, through a permit process, discharge of dredged or fill material into the waters of the United States, including wetlands. Actions described in this document comply with the requirements of Section 404 of the Clean Water Act and all other applicable federal, state, and local agencies.

Water quality in the project area would be protected by the implementation of erosion and sediment controls, such as silt fencing, straw bales, and sediment traps, as needed. Due to the potential for disturbance of archeological resources, silt fencing would only be used near streams and where steeper grades are present and not used in flatter areas with minimal shoulder disturbance. Reseeding and mulching would quickly stabilize disturbed areas. Staff at the Federal Highway Administration (FHWA) would prepare the *Erosion and Sediment Control Plan* for inclusion in the construction plans.

4. *National Historic Preservation Act of 1966*

This Act requires Federal agencies to establish programs for evaluating and nominating properties to the National Historic Register of Historic Places, and to consider the effects of undertaking a proposal on listed or eligible properties. Section 106 mandates that Federal agencies take into account the effects of their actions on properties listed or eligible and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment on said actions, if appropriate.

The NPS will consult with the State Historic Preservation Officer (SHPO) and complete roadwork according to National Register of Historic Places standards and criteria. Although the NPS has a programmatic agreement with the SHPO, their office would be consulted to specify the level of mitigation necessary for the project.

All ground disturbing activities associated with the project would be reviewed for archeological needs. Completion of compliance with Section 106 of the National Historic Preservation Act would be carried out in accordance with the National Park Service's Cultural Resources Management Guidelines (RM-28), and appropriate documentation and consultations undertaken.

Although no adverse effects to cultural resources are anticipated with the implementation of the proposed action, measures would be taken to ensure that adequate protection and consideration of cultural resources are carried out throughout the design and construction phases of the project.

5. *The National Park Service Organic Act of August 25, 1916*

This Act states that the fundamental purpose of national parks is "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The preferred alternative is supportive of this Act because it is the least intrusive on the natural and historic environment, and maintains the historic road corridor and vista for future Park visitors.

6. *Fish and Wildlife Coordination Act*

The Act of March 10, 1934, authorizes the Secretaries of Agriculture and Commerce to provide assistance to and cooperate with Federal and State agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife.

In addition, this Act authorizes the preparation of plans to protect wildlife resources, the completion of wildlife surveys on public lands, and the acceptance by the Federal agencies of funds or lands for related purposes provided that land donations received the consent of the State in which they are located.

The amendments enacted in 1946 require consultation with the Fish and Wildlife Service and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified" by any agency under a Federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources."

The 1958 amendments added provisions to recognize the vital contribution of wildlife resources to the Nation and to require equal consideration and coordination of wildlife conservation with other water resources development programs, and authorized the Secretary of Interior to provide public fishing areas and accept donations of lands and funds.

The amendments also titled the law as the Fish and Wildlife Coordination Act and expanded the instances in which diversions or modifications to water bodies would require consultation with the Fish and Wildlife Service. These amendments permitted lands valuable to the Migratory Bird Management Program to be made available to the State agency exercising control over wildlife resources.

V. Environmental Commitments

The No Action Alternative does not meet the purpose and need for the action. Therefore, the Build Alternative has been selected as the preferred alternative since it addresses the bank stabilization, erosion, and encroachment problems associated with the streams and the Natchez Trace Parkway. In order to minimize the environmental impacts associated with the preferred alternative, the following measures are recommended for implementation:

1. An Erosion and Sediment Control Plan would be prepared and included in the final construction plans.

2. The final construction plans would include directions to the Contractor for minimizing disturbance of woody and turf vegetation.

3. If additional archeological artifacts were encountered during excavation operations, construction would be halted immediately. The Southeast Archeological Center and the State Historic Preservation Office would be notified immediately.

4. The final construction plans would include directions and specifications to the Contractor for revegetating disturbed areas with non-invasive native plant species.

VI. Environmentally Preferred Alternative

The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by Council on Environmental Quality (CEQ) regulations. CEQ regulations provide direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Generally, this means the alternative that causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural and natural resources." [Question 6a, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations" (40 CFR 1500-1508), Federal Register Vol. 46, No. 55, 18026-18038, March 23, 1981].

The Build Alternative is the most environmentally preferred alternative. The Build Alternative would provide for the preservation and enhancement of the Park's natural, historic, and cultural resources; maximize protection of the biological and physical environment; and maintain visitor use and enjoyment of the Park. Although the Build Alternative would potentially impact the Bayou darter and other aquatic species temporarily; it is believed that through mitigation and the use of best management practices, any impacts to the natural environment would be minimized and considered insignificant.

VI. List of Preparers

The following individuals contributed to the development of this document:

Federal Highway Administration
- Jack Van Dop, Environmental Compliance Specialist
- Brigitte A. Azran, Environmental Compliance Engineer
- Ken Atkins, Project Manager

Natchez Trace Parkway
- Wendell Simpson, Superintendent
- D. Craig Stubblefield, Chief of Resource Management
- Christine Miller, Cultural Resource Specialist
- Bill Whitworth, Natural Resource Specialist

National Park Service
- Robert Felker, Landscape Architect, Denver Service Center

VIII. **Coordination**

As required by NPS policies and planning documents, it is the Park's objective to work with state, federal, and local governmental and private organizations to ensure that the Park and its programs are coordinated with theirs, and are supportive of their objectives, as far as proper management of the Park permits, and that their programs are similarly supportive of Park programs.

Consultation and coordination have occurred with numerous agencies for the development of the alternatives and preparation of the EA. The following people, organizations, and agencies were contacted for information, which assisted in identifying important issues, developing alternatives, and analyzing impacts:

U. S. Fish and Wildlife Service

U. S. Army Corps of Engineers

Mississippi State Historic Preservation Office

In order to give the public and all interested parties a chance to review the EA, it will be noticed for public comment for a minimum of 30 days through local newspapers. During this 30-day period, the EA will be available for review at the Natchez Trace Parkway Headquarters located at 2680 Natchez Trace Parkway, Tupelo, MS 31217-4399. Copies of the EA will also be sent to applicable Federal, State, and local agencies for review and comment.

IX. **References**

May 23, 2001, Field Trip Report. Rolando L. Garza, Southeast Archeological Center, Atlanta, Georgia. May 23, 2001.

Draft Natchez Trace Parkway - Wetlands and Waters of the U.S. Delineation, Wetland & Environmental Sciences, Inc., Richmond, Virginia. November, 2000.

X. Appendix A – Documentation of Agency Consultation

- FHWA letter to the Fish and Wildlife Service dated February 16, 2001 requesting a review of the project area and recommendations to prevent any adverse affect on threatened or endangered species.

U. S. Department
of Transportation

**Federal Highway
Administration**

Eastern Federal Lands
Highway Division

21400 Ridgetop Circle
Sterling, VA 20166-6511

FEB 16 2001

Refer to: HPC-15

Mr. Ray Aycock
Field Supervisor
U.S. Fish and Wildlife Service
6578 Dogwood Parkway, Suite A
Jackson, MS 39213

Dear Mr. Aycock:

In cooperation with the National Park Service (NPS), the Eastern Federal Lands Highway Division (EFLHD), of the Federal Highway Administration (FHWA), is currently preparing plans for the stream bank stabilization of the Big Bayou Pierre and the North Fork of Coles Creek, in the vicinity of the Natchez Trace Parkway, Jefferson County, Mississippi. This project has been designated Project PRA-NATR 3T6, V5.

The project consists of providing stream bank stabilization through the installation of permanent longitudinal peaked stone toe protection (LPSTP) and riprap trench protection placed along the outside edge of the existing stream bend, in the existing stream flow channel. Due to the extremely high and unstable banks, construction access from the top of the bank is not possible. In order to minimize the extent of temporary ground disturbance for haul roads leading to the streams, existing natural draws will be utilized. The temporary haul roads will be located to minimize disturbance to existing vegetation and will be removed upon completion of the stabilization work. Sediment control measures will be installed and maintained during the life of construction activities. All disturbed areas will be stabilized with permanent vegetative cover prior to the removal of sediment control measures. The plans will include restrictions on temporary construction access including temporary stream crossings and associated fill placement in these streams. Implementation of the proposed stone bank stabilization will likely require construction of two temporary haul road access points to each stream (at Big Bayou Pierre and North Fork Coles Creek) and two temporary construction crossings of each stream. The work is proposed to be accomplished during periods of seasonal low flow.

The purpose and need of this project is the stabilization of these two streams' bank erosion, which, if not halted, will result in a danger to public safety and the physical condition of the Natchez Trace Parkway. Stabilization of these two stream banks will significantly reduce the sediment presently entering both of these streams from the continuing bank erosion.

An erosion and sediment control plan will be prepared for this project and implemented during construction.

On July 22, 1999, Mr. Jack Van Dop and Ms. Brigitte Azran of my office, met with Ms. Kathy Lunceford of your office; Messrs. Harold Lee, Jim Wiseman, and Louis Johnson of the Corps of Engineers; and Mr. Ron Porter of the Mississippi Department of Environmental Quality regarding this project and others along the Natchez Trace Parkway. At that time, Ms. Lunceford indicated that a Federally-listed darter species may inhabit the Big Bayou Pierre River.

We request that you review the project area (Big Bayou Pierre and the North Fork Coles Creek) to determine if any other Federally-listed species may be present or affected by the proposed project. If so, please provide any restrictions or mitigation requirements that should be included in the final project plans and specifications, in order to ensure that this project does not adversely affect any Federally-listed threatened or endangered species.

A preliminary set of plans and a vicinity map are enclosed for your review. Questions concerning this matter should be directed to Mr. Jack Van Dop, Environmental Compliance Specialist, at (703) 404-6282.

Sincerely yours,

Alan T. Teikari
Planning & Coordination Engineer

Enclosures
cc:
Mr. Jerry Belson, Regional Director, SER, NPS, Atlanta, GA
Mr. Wendell Simpson, Superintendent, NATR, NPS, Tupelo, MS
Mr. William Witmer, Project Manager, NPS-DSC, Denver, CO
Mr. Robert Felker, Field Representative, DSC, NPS, Tupelo, MS